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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,784	04/02/2004	Paul J. Thompson	E0001/7067	9955

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BOSTON, MA 02109

EXAMINER

GANESAN, SUBA

ART UNIT	PAPER NUMBER
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3738

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/816,784

Applicant(s)

THOMPSON ET AL.

Examiner

Suba Ganesan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/20/06, 9/10/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-2, 11, and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Phelps et al. (U.S. Pat. No. 6290728).

4. Phelps et al. discloses a stent comprising a main body with a plurality of cells and flared ends with predefined bed locations. The end structure includes a plurality of

cantilever members connected at the bend location (see for example fig. 8). Phelps further discloses a stent implanted at the junction between two vessels, with the main body located within the first vessel and the end structure conformed to an interior surface of the second vessel (fig. 8).

5. Claims 1 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Bonsignore et al. (U.S. P.G. Pub. No.: 2004/0186555).

Bonsignore et al discloses a stent comprising a main body with a plurality of cells and flared ends with predefined bend locations (see fig. 7). X-ray visible marker 804 is positioned within enlargement 802 of the flared cantilever member.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3-8, 10, 12-17, 24 rejected under 35 U.S.C. 103(a) as being unpatentable over Phelps et al. (U.S. Pat. No. 6290728) in view of Wijay (U.S. Pat. No. 6203569).

8. Phelps is explained supra. Phelps does not disclose the use of notches to facilitate bending. Wijay teaches the use of notches for the purpose of bending sections of a sent. These notch sections have a reduced cross sectional area (see figs. 5-8 and Abstract) which appear to be 25-60% smaller than adjacent locations, and are located on both the interior and exterior surfaces of the stent. Wijay further teaches the use of

shoulders at the bend locations (see fig 6) and linking members that extend between the struts (see fig. 7) Therefore it would have been obvious to one of ordinary skill in the art to modify the bend locations of Phelps to include notches, shoulders, and linking members as taught by Wijay for the purpose of facilitating improved bending and reducing strain at the bend location to eliminate the risk of breaking.

9. Claims 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bonsignore et al. (U.S. P.G. Pub. No.: 2004/0186555) in view of Wijay (U.S. Pat. No. 6203569).

10. Bonsignore et al. discloses a stent with support members defining an undulating pattern of peaks and valleys extending about a circumference with end struts flared relative to the main body, the end struts being connected to at least some peaks of the main body (see fig. 7). Note that examiner is considering enlargement 802 to be an end strut connected to the main body via undulating support members 108(a). Bonsignore does not disclose the use of notches to facilitate bending. Wijay teaches the use of notches for the purpose of bending sections of a sent. Therefore it would have been obvious to one of ordinary skill in the art to modify the bend locations of Bonsignore to include notches, shoulders, and linking members as taught by Wijay for the purpose of facilitating improved bending and reducing strain at the bend location to eliminate the risk of breaking.

11. Regarding claims 19,21, Bosignore fails to disclose end struts connected to every peak or every other peak. It would have further been obvious to one of ordinary

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skill in the art to modify the stent of Bonsignore to include connecting an end strut to every other peak or every peak of the end support member for the purpose of increasing the amount of anchoring and support structures at the implantation site, since doing so is simply a matter of design choice well within the skill of an ordinary worker in the art.

12. With respect to claim 22, Bosignore fails to disclose end struts with two enlargements with radiopaque markers for each end strut. It would have been further obvious to one of ordinary skill in the art to modify the stent of Bonsignore to include two enlargements including radiopaque markers for the purpose of increasing the visibility of the stent about its entire circumference.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suba Ganesan whose telephone number is 571-272-3243. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached on 571-272-4754. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SDG 3/2/2007

BRIAN E. PELLEGRINO
PRIMARY EXAMINER

Brian Pellegrino